# Tripti Singh

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## **EDUCATION**

# C.V Raman Global University - B.Tech in CSE (AI/ML), CGPA: 9.11

Oct 2021 - May 2025

#### EXPERIENCE

#### IIT Bombay - R&D Intern, IEOR

Jan 2025 – Present

- Designed and implemented AR/VR simulations using Unity and WebXR for logistics decision support.
- Integrated LLMs and backend systems to deliver dynamic data-driven outcomes.
- Optimized 3D cargo simulation for real-time performance and usability across WebXR platforms.

#### Campus Network - Product Intern

Jul 2024 - May 2025

- Collaborating on full-stack development for a peer-to-peer mock interview and networking platform.
- Driving UX improvements and scalability with cloud-native technologies.

## IIT Kanpur - Research Intern

May 2024 - Jul 2024

- Developed interaction modules in Unity using UltraLeap for hand tracking in VR.
- Contributed to cognitive science research focusing on spatial encoding.

### Priyaqubit Pvt. Ltd - AI/ML Intern

Jan 2023 - Jun 2023

- Engineered scalable AI/ML pipelines for healthcare applications.
- Implemented predictive models and monitored performance on real-time data.

#### **PROJECTS**

# 3D Cargo Loader Simulation (Unity3D, WebGL, Optimization)

- Built simulation to perform 360 Degree Loading, Unloading analysis for packaging industry.

# Automatic Speech Recognition (Nvidia Nemo, docker, Fastapi)

- An Automatic Speech to Text Transcribing system using Nvidia Nemo stthindidemo model using Docker and FASTApi

# Peripersonal Space Study in VR (Unity3D, HTC Vive, UltraLeap)

- Engineered VR interaction system for cognitive behavior research.

## SKILLS

- Programming Languages: Python, Java, C#
- Frameworks & Libraries: TensorFlow, PyTorch, Scikit-learn, OpenCV, Pandas, NumPy
- Tools & Platforms: Git, Docker, Kubernetes, Linux, AWS, Unity3D, WebGL
- Databases: MySQL, MongoDB
- Other: Agile, REST APIs, GitHub, JIRA, Data Structures, Algorithms

#### CERTIFICATIONS

- Diploma in Embedded and AI
- Google UI/UX Design Certificate
- Network Security: Coursera, IBM, CCNA Cisco

#### Publications

- Sentiment Analysis on LinkedIn using TextBlob Published in IEEE Xplore. DOI
- Immersive Learning in Ayurveda Conference paper published by Taylor & Francis.

# Leadership and Responsibilities

- Operations and Strategy Lead, Incubator Team: Led startup ideation sessions, pitch mentoring, and execution.
- Lead, Google Developer Student Club: Conducted bootcamps, hackathons, and mentored peers in tech upskilling.